

## WELL-WORKOVERS

PINC NO.	PINC	Authority	Enforcement Action
<b>WELL-WORKOVER OPERATIONS</b>			
W-100	Have all wells in the same well-bay which are capable of producing hydrocarbons been shut in below the surface with a pump-through-type tubing plug or SSSV at the surface with a closed master valve prior to moving well-workover rigs and related equipment (or as otherwise approved by the District Supervisor)?	92	W/C
W-101	Is the well to which a well-workover rig or related equipment is to be moved equipped with a back-pressure valve prior to removing the tree and installing and testing the BOP system?	92	W/C
W-102	Have crew members been instructed in the safety requirements of the operation to be performed, possible hazards to be encountered, and general safety considerations to protect personnel, equipment and the environment prior to engaging in well-workover operations?	96	W
W-103	Has the date and time of safety meetings been recorded at the facility and is the information available for review by MMS representatives?	96	W
W-104	Have all units being used for well-workover operations which have both a traveling block and a crown block been equipped with a safety device which is to be designed to prevent the traveling block from striking the crown block?	101	C
W-105	Has the device been checked for proper operation weekly and after each drill-line slipping operation?	101	W
W-106	Have the results of the operational check specified in W-105 been entered in the operations log?	101	W
W-107	Has the lessee received written approval from the District Supervisor prior to conducting well-workover operations?	103(a)	C
W-108	Is the well being continuously monitored during well-workover operations and not left unattended at any time unless the well is shut-in and secured?	104(a)	W

W-109	Is the annulus being filled with well-control fluid before the change in such fluid level decreases the hydrostatic pressure 75 psi or every five stands of drill pipe or workover string, whichever gives a lower decrease in hydrostatic pressure when coming out of the hole with drill pipe?	104(b)	W
W-110	Has the number of stands of drill pipe or workover string and drill collars that may be pulled prior to filling the hole and the equivalent well-control fluid volume been calculated and posted near the operator's station?	104(b)	W
W-111	Is a mechanical, volumetric, or electronic device utilized to determine the amount of well-control fluid required to fill the hole?	104(b) 104(c)(2)	C
	<b>Has the following well-control fluid equipment been installed, maintained, and utilized:</b>		
W-112	A fill-up line above the uppermost BOP?	104(c)(1)	C
W-113	A recording mud-pit-level indicator with both a visual and an audible warning device?	104(c)(3)	C
	<b>Does the BOP system for well-workover operations with the tree removed include as a minimum the following:</b>		
W-114	Three preventers when the expected surface pressure is less than 5,000 psi?	105(b)(1)	C
W-115	Four preventers when the expected surface pressure is 5,000 psi or greater?	105(b)(2)	C
W-116	Dual pipe rams installed on one of the pipe-ram preventers when dual tubing strings are being handled simultaneously?	105(b)(2)	C
	<b>When a tapered drill string is used, does the BOP system include, as a minimum:</b>		
W-117	Four preventers when the expected surface pressure is less than 5,000 psi?	105(b)(3)(i)	C
W-118	Five preventers when the expected surface pressure is 5,000 psi or greater?	105(b)(3)(ii)	C
	<b>Does the BOP system for well-workover with the tree removed contain the following equipment:</b>		
W-119	A hydraulic-actuating system that provides sufficient accumulator capacity to supply 1.5 times the volume necessary to close all BOP equipment units with a minimum pressure of 200 psi above the precharge pressure without assistance from a charging system?	105(c)(1)	C

W-120	A secondary power source, independent from the primary power source, with sufficient capacity to close all BOP system components and hold them closed?	105(c)(2)	C
W-121	Locking devices for the pipe-ram preventers?	105(c)(3)	C
W-122	At least one remote BOP control station and one BOP control station on the rig floor?	105(c)(4)	C
W-123	A choke line and a kill line each equipped with two full opening valves and choke manifold?	105(c)(5)	C
W-124	At least one remotely-controlled valve each on the choke line and on the kill line?	105(c)(5)	C
W-126	Is the pressure rating of the choke and kill lines and associated equipment at least equivalent to the pressure rating of the ram preventers?	105(c)(5)	C
W-127	Does the minimum BOP-system components with the tree in place and performed through the wellhead inside conventional tubing using small-diameter jointed pipe as a work string include two sets of pipe rams and one set of blind rams?	105(d)	C
	<b>Does the minimum BOP-system components for well-workover operations with the tree in place and performed by coiled-tubing operations include:</b>		
W-128	One set of pipe rams hydraulically operated?	105(e)(1)	C
W-129	One two-way slip assembly hydraulically operated?	105(e)(2)	C
W-130	One pipe-cutter assembly hydraulically operated?	105(e)(3)	C
W-131	One set of blind rams hydraulically operated?	105(e)(4)	C
W-132	One pipe-stripper assembly?	105(e)(5)	C
W-133	One spool with side outlets?	105(e)(6)	C
	<b>Does the minimum BOP-system components for well-workover operations with the tree in place and performed by snubbing operations include the following:</b>		
W-134	One set of pipe rams hydraulically operated?	105(f)(1)	C
W-135	Two sets of stripper-type pipe rams hydraulically operated with spacer spool?	105(f)(2)	C

W-136	Is an inside BOP or spring-loaded, back-pressure safety valve and an essentially full-opening, work-string safety valve in the open position being maintained on the rig floor at all times during well-workover operations when the tree is removed or during well-workover operations with the tree installed and using small tubing as the work string?	105(g)	C
W-137	Is a wrench to fit the work-string safety valve readily available?	105(g)	C
W-138	Are connections readily available for inserting valves in the work string?	105(g)	C
W-139	Have all BOP system components been successfully tested to a low pressure of 200 to 300 psi prior to conducting high-pressure tests?	106(a)	W/C
W-140	Have ram-type BOP's, related control equipment, including the choke and kill manifolds, and safety valves been successfully tested to the rated working pressure of the BOP equipment (or as otherwise approved by the District Supervisor)?	106(a)	W/C
W-141	Have variable bore rams been pressure-tested against all sizes of work string in the well excluding drill collars?	106(a)	W/C
W-142	Have surface BOP systems been pressure tested with water?	106(a)	W/C
W-143	Has the annular-type BOP been successfully tested at 70 percent of its rated working pressure?	106(a)	W/C
W-144	Has each valve in the choke and kill manifold been successfully, sequentially pressure tested to the ram-type BOP test pressure?	106(a)	W/C
<b>Have the BOP systems been tested at the following times:</b>			
W-145	When installed?	106(b)(1)	W/C
W-146	At least every 7 days?	106(b)(2)	W/C
W-147	At least once every 30 days during operation for the blind or blind-shear rams?	106(b)(2)	W/C
W-148	Following repairs that require disconnecting a pressure seal in the assembly?	106(b)(3)	W/C
W-149	Do the tests alternate between control stations and at staggered intervals to allow each crew to operate the equipment?	106(b)(2)	W/C

W-150	Are all personnel engaged in well-workover operations participating in a weekly BOP drill to familiarize crew members with appropriate safety measures?	106(c)	W
W-151	Are the time, date, and results of all pressure test, actuations, inspections, and crew drills of BOP system, system components, and marine risers recorded in the operations log or referenced document?	106(d)	W
W-152	Has the casing been pressure tested, calipered, or otherwise evaluated every 30 days during prolonged operations?	107(b)	W
W-153	Is the well from which a well-workover rig or related equipment is to be moved equipped with a back-pressure valve prior to removing the BOP system and installing the tree?	92	W/C
W-154	Are accumulator regulators supplied by rig air, and without a secondary source of pneumatic supply, equipped with manual overrides, or alternately, are other devices provided to ensure capability of hydraulic operations if rig air is lost?	105(c)(1)	C
W-155	Are BOP test pressures recorded on a pressure chart, unless otherwise approved by the District Supervisor?	106(d)	W
W-156	Is the test interval for each BOP component tested sufficient to demonstrate that the component is effectively holding pressure?	106(d)	W
W-157	Are BOP test pressure charts certified as correct by the operator's representative at the facility?	106(d)	W
W-158	Does the documentation indicate the sequential order of BOP and auxiliary equipment testing and the pressure and duration of each test?	106(e)(1) 106(e)(4)	W
W-159	Is the control station used during the test identified in the operations log or referenced documents?	106(e)(2) 106(e)(4)	W
W-160	For subsea systems, is the pod used during the test identified in the operations log or referenced documents?	106(e)(2) 106(e)(4)	W
W-161	Are any problems or irregularities observed during BOP and auxiliary equipment testing and any actions taken to remedy such problems or irregularities recorded in the operations log or referenced documents?	106(e)(3) 106(e)(4)	W
W-162	Are all records including pressure charts, operations log, and referenced documents of BOP tests, actuations, and inspections available at the facility for the duration of the well-workover	106(e)(4)	W

activity?

W-163	Are all such records retained for a period of two years at the facility, at the lessee's field office nearest the facility, or at another location conveniently available to the District Supervisor?	106(e)(4)	W
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### **WIRESLINE OPERATIONS**

W-170	Are wireline operations conducted so as to minimize the leakage of well fluids?	108(a)	C
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W-171	For all wireline perforating operations and all other wireline operations where communication exists between the completed hydrocarbon-bearing zone(s) and the well bore, is a lubricator assembly containing at least one wireline valve utilized?	108(b)	C
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W-172	When a lubricator is initially installed on a well, is it pressure tested to the expected shut-in pressure?	108(c)	W/C
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